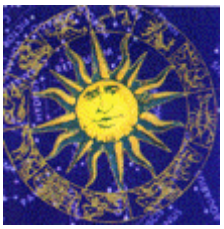
THE SENTINEL
OFFICIAL SAFETY NEWSLETTER OF CIVIL AIR PATROL

June is Cancer in the Sun Month

Protection from sun exposure is important all year round, not just during the summer or at the beach. Any time the sun's ultraviolet (UV) rays are able to reach the earth, you need to protect yourself from excessive sun exposure. UV rays can cause skin damage during any season or temperature. Relatively speaking, the hours between 10 a.m. and 4 p.m. are the most hazardous for UV exposure in the continental United States. UV radiation is the greatest during the late spring and early summer in North America. UV rays reach you on cloudy and hazy days, as well as on bright and sunny days. UV rays will also reflect off any surface like water, cement, sand, and snow.



There are three types of UV rays: ultraviolet A (UVA), ultraviolet B (UVB), and ultraviolet C (UVC). UVA is the most abundant source of solar radiation at the earth's surface and penetrates beyond the top layer of human skin. Scientists believe that UVA radiation can cause damage to connective tissue and increase a person's risk for developing skin cancer. UVB rays are less abundant at the earth's surface than UVA because a significant portion of UVB rays is absorbed by the ozone layer. UVB rays penetrate less deeply into the skin than do UVA rays, but also can be damaging. UVC radiation is extremely hazardous to skin, but it is completely absorbed by the stratospheric ozone layer and does not reach the surface of the earth. UV exposure appears to be the most important environmental factor in the development of skin cancer and a primary factor in the development of lip cancer. Although getting some sun exposure can yield a few positive benefits, excessive and unprotected exposure to the sun can result in premature aging and undesirable changes in skin texture. Such exposure has been associated with various types of skin cancer, including melanoma, one of the most serious and deadly forms. UV rays also have been found to be associated with various eye conditions, such as cataracts.

To counter these threats, you can wear protective clothing, such as a wide-brimmed hat, long-sleeved shirt, and long pants. For eye protection, wear wraparound sunglasses that provide 100 percent UV ray protection. And always wear a broad-spectrum (protection against both UVA and UVB rays) sunscreen and lip-screen with at least SPF 15. Remember to reapply as indicated by the manufacturer's directions.

Be Sun Smart This Summer

101 Critical Days of Summer Speed Facts

- Chances of death or serious injury double for every 10 mph over 50 mph a vehicle travels.
- Crash involvement rates are almost six times greater for vehicles traveling 10 mph above or below the average speed.
- 44% of speed-related fatalities occur on non-interstate roads posted at 55 mph.
- 60% of speed-related fatal crashes occur at night (6 p.m. to 6 a.m.).
- 66% of speed-related crashes involve only a single vehicle.

- Speed-related crashes account for 24% of all fatal crashes on straight roadway sections, but constitute 48% of all fatal crashes occurring on curves.

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Coping With Summer Heat

Considering the number of summer activities that our members are involved in, our organization has a high exposure to this dangerous problem. For this reason, let's examine the recognition, treatment and prevention of several heat-associated illnesses. First, we should know how the body cools itself when it gets hot. Two things happen – increased blood flow to the skin and evaporation of sweat (water and sodium). Both of these physiological responses require proper hydration. Sweating additionally requires electrolyte replacement, principally in the form of sodium. When water, sodium and other electrolytes are not replaced, heat transfer is impeded, body core temperature rises and the stage is set for heat illness.

There are varying degrees of heat disorders starting with the least serious - heat syncope. Syncope involves fainting, usually due to an improper cool-down and is easily treated by having the person lie down in the shade with their legs elevated and drink cold fluids. Heat cramps affect the legs and abdomen. The cause is usually due to sodium loss during sweating. Treatment of heat cramps involves rest, cool-down, muscle massage and sodium replacement via a sports drink. The remaining heat illnesses are very serious and require medical attention. Heat exhaustion is characterized by thirst, headache, nausea, dizziness, fever (102°-105°), vomiting, fatigue and impaired judgment. While arranging transportation to the hospital, have the person rest, cool-down and drink cold fluids. At the hospital, they will be able to monitor sodium level during rehydration. Heat stroke is the most severe case of heat illness. Characteristics include hot, flushed skin, confusion, rapid heartbeat, shallow breathing, high fever (>105°) and the victim may become unconscious. This is a very serious emergency! CPR may be necessary. Immediately transport to an Emergency Room.

So, how do you prevent heat illness? Drink plenty of fluids. Stick with water or sports drinks and avoid caffeine because of its diuretic effect. You should drink a full quart per hour, but don't ever exceed 1.5 quarts per hour. Why? Because you can bring on a condition known as hyponatremia. This condition occurs when sodium is lost through sweating and the over-hydration dilutes what sodium remains in your blood. Hyponatremia symptoms may resemble heat exhaustion or heat stroke, except that the body temperature won't rise. Hyponatremia can result in seizures, coma and even death.

When it comes to heat illness, prevention should be stressed. Educate your people, watch for symptoms and intervene early. Be sure to know your heat illness plan before you need it.

CAP Leads The World In Glider Education and Safety

In the past few years, CAP has focused on building mutually beneficial partnerships with organizations affiliated with our mission areas. One of the least known, but most successful partnerships is with the ***Soaring Safety Foundation (SSF)***. Civil Air Patrol was instrumental in the development of many of the on-line educational and safety courses that reside on the SSF website: http://www.soaringsafety.org/

Two of the most widely used courses - the Wing Runner Course and the Tow Pilot Course are an annual requirement in many ***Soaring Society of America (SSA)*** clubs and other soaring clubs as far away as South America, Egypt and Japan. In fact, during the last three years approximately 2,400 wing runners and 900 tow pilots have been trained. Now is a great time to review these courses so you'll be at the "top of your game" during your summer soaring activities. You can access these courses from both the CAP Glider webpage: https://ntc.cap.af.mil/ops/dot/Glider/ or the SSF webpage: http://soaringsafety.org/dl/index.html.

Other Safety Meeting Topics

- **Cookout Safety** - http://southernfood.about.com/cs/bbqgrillrecipes/a/cookout_safety.htm
- **USCG Boating Safety** - http://www.uscgboating.org/safety/safety.htm
- **The Danger of Mixing Cleaning Products** - http://www.state.nj.us/health/eoh/cehsweb/bleach_fs.pdf

"Tomorrow" -
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